

Appendix B – Comments Received During Public/Agency Review Period and FWS Responses

The FWS released the Draft CCP/EIS on December 6, 2006, for public review and comment. The initial comment period was to close on February 23, 2007, eighty days later.¹⁷⁸ During that initial period, requests for extensions were received from the Yakama Nation and Lower Columbia Basin Audubon Society. As a result, the FWS extended the comment period for an additional fifteen days to March 10, 2007.

During the ninety (or ninety-five) day comment period, the FWS received 308 timely comment letters.¹⁷⁹ These comment letters to the Draft CCP/EIS were provided to the Portland, Oregon, offices of Jones & Stokes, an international environmental consulting firm, for review and cataloging. The overwhelming majority of letters focused on four main themes—Boat Launches, Horseback Use, Hunting on Islands, and the Observatory on Rattlesnake Mountain—and comments were organized around these themes.¹⁸⁰ A fifth category, “Other,” was included to capture all other comments not fitting within these topics. Additional, minor themes are identified within each of the five main topics.

Very few direct comments were received on the factual content of the draft. Most comments were directed at hunters’ rights, access to public lands, wildlife management, etc., expressing the writer’s opinion of how the Monument should be managed. These comments were grouped together according to the categories discussed above. Where the opinion expressed provided some level of detail, or was based on a real or perceived fact, the FWS has provided a response. Where the comment represented solely an opinion and was not supported by any assertion, the FWS considered them in selection of the preferred alternative but did not respond to them here, other than to thank the writers for expressing their opinions and thoughts.

¹⁷⁸ Due to mailing transit times and the end-of-year holidays, the comment period was more realistically seventy-five days.

¹⁷⁹ The term ‘letters’ is defined as an written correspondence received during the comment period related to the Draft CCP/EIS. Most “letters” were actually in the form of email (sixty-three). Eleven comments were submitted through the Monument’s web site. Only thirteen letters were actually sent via United States Postal Service mail or through other carriers.

One problem related to the use of email, and especially the web, is that many pieces of correspondence were anonymous. As such, there is no way to verify the validity of the comment/commenter, or to clarify points made. Likewise, there is no way to distribute the final version of the plan back to those providing comments anonymously.

¹⁸⁰ Due to the uniformity of comments and the volume of letters received, copies of the actual letters are not reprinted here.

Boat Launches

The majority of letters received during the comment period were directed at operation of boat launches along the Columbia River. Of these, indicated a desire to continue operations as they currently exist, especially that of the White Bluffs Boat Launch.

Boat Launches – Opposed To Further Restrictions

Comments: While most letters did not provide a rationale as to why the status quo should be maintained, several writers did provide an explanation of their thoughts. Reasons included:

- 1) Many, if not most anglers like to fish the middle stretch of the river. Eliminating the White Bluffs Boat Launch would mean an increase in travel times, thereby impacting the fishing experience.
- 2) Increased travel distances would have a corresponding increase in fuel consumption, noise pollution, and bank erosion from boat wakes.
- 3) Closing the White Bluffs Boat Launch would increase congestion at other boat launches.
- 4) Closing boat launches would decrease access points for rescue operations and create undue safety issues.
- 5) Closing launches to motorized use would exhibit ‘favoritism’ to floatboaters.
- 6) Closing the White Bluffs Boat Launch would negatively impact handicapped and elderly boaters and could be a violation of the Americans With Disabilities Act (ADA).
- 7) Closing the White Bluffs Boat Launch would negatively impact the economies of communities north of the Monument.
- 8) Improvements made to the White Bluffs Boat Launch would create sedimentation and disturb salmon spawning habitat.
- 9) Closing the White Bluffs Boat Launch would close off mid-river access to anglers and other boaters who did not own, or could not afford, a jetboat.

Response: The argument that closing the White Bluffs Boat Launch would unduly impact people who own propeller or small boats is especially compelling, and the FWS revised preferred alternative reflects the need to maintain this boat launch. Likewise, the desire to limit fuel consumption, keep

noise pollution concentrated, and provide for a quality fishing experience (as opposed to spending significant time in transit) factored into this decision.

Of the other points raised:

- 1) It is unlikely that erosion would be impacted by any decision over boat launches, given the much larger likely impact of river fluctuations from dam operations and bank slumping from irrigation return.
- 2) With the understanding that other boat launches would be developed before any would be closed, it is unlikely that congestion would become a factor. Likewise, as any additional boat launches would most likely be located north of the river, there should not be any impact to communities north of the Monument.
- 3) As the White Bluffs Boat Launch is not currently ADA compliant, there would be no impacts to handicapped or elderly persons. In fact, replacement boat launches would be fully ADA compliant.
- 4) No construction of any boat launches would occur during periods when it would impact salmon spawning or other sensitive wildlife cycles (e.g., great blue heron nesting).

In short, the points raised by the boating community were compelling, and the preferred alternative has been revised to reflect both the need to retain the White Bluffs Boat Launch and provide for additional, developed boat launches in areas where boat launching is creating safety and resource concerns (see Chapter 4). However, in order to maintain a quality experience and control resource damage, there will likely be a need to develop limits to use at the White Bluffs Boat Launch.

Comments: A couple of letters expressed a desire to see the Ringold launching area remain unchanged, the reasoning being that the undeveloped area supports boat launching at all river levels.

Response: Any boat ramp constructed would be sited and designed to accommodate existing river operations.

Boat Launches – Support Additional Restrictions

Comments: Again, many letters supported alternatives that imposed restrictions on boat launches, including closure in some cases. Of the letters that provided rationale, none proposed a closure of the river to motor traffic or any elimination of all boat launches. Instead, they proposed changes to boat use, such as closing the river to motorboats two days a week or somehow limiting motorboat use. Some letters suggested that the White Bluffs Boat Launch be closed in order to provide sanctuary for wildlife.

Response: Options that control surface use of the river (eliminating boat traffic, implementing motor-free days) are not within the jurisdiction of the FWS. One option proposed that is within the FWS's jurisdiction—closure of the White Bluffs Boat Launch to provide sanctuary for wildlife. However, the FWS does not consider this to be a likely outcome of closure. The area immediately adjacent to the White Bluffs Boat Launch would likely see a decrease in motorboat use; however, as many people like to fish in this area, those traversing long stretches of the river to reach this area would generate significant disturbance in reaching their preferred fishing sites. Likewise, disturbance would increase around launches remaining open. The overall impacts to wildlife could actually be increased should there be no boat launch in the middle section of the river.

Boat Launches – Other Comments

Comments: As noted, comments on boat launches represented the majority of comments received. However, most comments were actually suggestions on how to operate and/or improve either the launches or access. These included:

- 1) Improving launches at Vernita, Ringold and White Bluffs into fully developed boat launches.
- 2) Providing launching facilities for floatboaters separate from that of motorboats.
- 3) Improving road access and parking facilities, and restricting use to those areas.
- 4) Providing permanent sanitary facilities.
- 5) Implementing a fee system for boat launching.
- 6) Providing more law enforcement presence.
- 7) Provide for a boat launch on the south shore of the river.

Response: Due to numerous factors—public safety, easier access for law enforcement, population increases, and resource protection concerns—the FWS believes many of these ideas could be implemented. The revised preferred alternative reflects a need to provide for better facilities (roads, restrooms, parking, the launches themselves) at all major boat launching sites. Likewise, an increased law enforcement presence is desired, funding dependent. However, although the CCP does include alternatives that consider a boat launch on the south shore, given the current state of Hanford Site cleanup and security concerns, the preferred alternative does not include a boat launch along the south shore; it would be appropriate to reconsider this option when the CCP is revised following changes in DOE operations. The question of fees will be addressed in a step down plan.

Comments: Other comments received centered around resource protection when/if construction occurs. These include consultation with rare plant botanists and cultural resource specialists.

Response: The FWS is committed to involving all experts in design and implementation of recreational facilities.

Horseback Use

Horseback riding was also a controversial topic, generating a large volume of letters. These letters were split along two lines—restricting or eliminating horseback use, or in opposition to restrictions. It should be noted that the Appropriate Uses test (Appendix H) has found that cross-country (unrestricted) horseback use is not an appropriate use of the Monument, but that horseback use on FWS roads and designated trails is an appropriate and compatible use.

Horseback Use – Oppose Additional Restrictions

Comments: Numerous letters were received in opposition to restricting horseback use on the Monument, citing a wide range of rationale. Comment letters stated that insufficient research has been conducted to prove that elimination of cross-country horseback riding from the Monument is necessary, and several letters sent citations for alternative research on the impacts of horses to public lands. Other comments stated that horseback use is less intrusive to wildlife than hiking or that cross-country horseback riding would have minimal effect on habitat relative to the existing elk population. Several letters noted that uses other than horseback riding spread weeds (i.e., shoes, tires, birds, wind, etc.). One letter stated that equestrian use is an alternative to hiking to promote the “Big 6” uses of national wildlife refuges. Others noted that horse could serve as a means to visit non-motorize areas for disabled visitors; one letter stated that limiting horseback use is discriminatory or limiting towards handicapped or elderly individuals and/or non-compliant with the ADA. Several letters requested that the ability to use stock for hunting purposes not be eliminated. Others stated that limiting horseback use to shared trails with motorized traffic is unacceptable. One letter suggested that eliminating horseback use would be detrimental to the local economy.

Response: The preferred alternative allows for horseback use on FWS roads and designated trails. As noted, cross-country (unrestricted) horseback use was found to be not appropriate under the Appropriate Uses test for the Monument (Appendix H), and as described in detail in the Horseback Riding Compatibility Determination (Appendix I). Due to the potential threats to Monument resources which could occur from unrestricted horseback riding, this activity will be allowed only on FWS roads and designated trails.

Horseback Use – Support Additional Restrictions

Comments: Most letters received on horseback use were opposed to restrictions. However, a few supported controlling horseback use. Most of these letters stated that horseback use damages vegetation and microbiotic crust, is not compatible with resource protection, and/or spreads noxious weeds, thereby increasing fire danger. Others stated that horseback use must be restricted to be consistent with Goal 7 and/or resource protection goals while others stated that horses should be limited to designated well-defined trails only.

Response: As described in detail in the Horseback Riding Compatibility Determination, when done in the appropriate manner and locations, the use of horses to support wildlife-dependent activities can be an appropriate use and compatible use on a national wildlife refuge. The preferred alternative supports this and the use of horses on the Monument, although to be compatible with resource needs, horseback use must be limited to FWS roads and designated trails (see Appendix M).

Horseback Use – Additional Comments

Comments: Although most horse-related letters discussed horseback riding restrictions, some writers provided other suggestions. One letter suggested that the FWS work with other agencies and horseback riding groups on promoting a weed-free forage and hay program. Another writer suggested a horse camp be established at Vernita or Ringold. Another requested that the trailhead off Highway 225 not be depicted on maps as it will increase hiking traffic and conflict with horseback use.

Response: These are all viable suggestions which will be addressed through development of a subsequent step down Visitor Services or Equestrian Plan.

Observatory

Comments: The second largest volume of comments received, after boat launches, was over the possible removal of the observatory on Rattlesnake Mountain. Comment letters opposed to the idea stated that the removal of the observatory was not necessary, would limit educational opportunities, particularly astronomy, and would be an unnecessary expense. Other comment letters stated that operation of the observatory has minor environmental impacts, that remote operation limits physical access but still provides educational opportunities via the internet, and that it offers tourist opportunities and the associated economic opportunities. Still other comment letters were opposed to the relocation of the observatory and stated that this action would degrade the quality of the observations as the remote location, dark skies, and elevation improved observations. One letter stated that the telescope was the largest in the state of Washington.

Letters in support of removal noted the positive impacts to natural and cultural resources (e.g., the elimination of artificial raptor perches; see Chapter 4), including restoration of native habitats and a site sacred to Native Americans in the area. Other letters favored relocation of the observatory to promote natural and tribal restoration of the area, or as a better option than demolition.

Response: The observatory is not a recommended use of the Monument (see Section 2.10.2.11 Objective 1-11: Restoration of Lithosol Habitat) and the preferred alternative reflects the actions that the FWS has identified as being in the best interest of resource protection. While the CCP notes that there would be minor environmental impacts from removal (see Chapter 4), the benefits of observatory removal and native habitat restoration outweigh these minor, temporary impacts. Alternate observatory facilities in the area (Sunnyside, Columbia Basin College) can provide education opportunities while protecting Monument resources.¹⁸¹ Since the observatory is located in a closed area of the Monument where general public access is restricted, relocation of the observatory to a publically accessible location could offer opportunities to develop tourism, economic and educational opportunities.

Hunting

Hunting – Support

Comments: Many comment letters received that were in general support of hunting on the Monument. Specific ideas submitted included: 1) Implementation of a permit system to control hunting; 2) conducting all hunting as per WDFW regulations; 3) allowing the use of temporary blinds; 4) support for the current WDFW pheasant release program; 5) opening the area around the Saddle Mountain Lake for upland bird hunting; and 6) using waterfowl hunting as a means of population control. Hunting by Native American tribal members was also discussed with the idea that tribal access must be maintained according to treaty rights and that Native Americans be given a priority status related to hunting; there were also letters that did not support any special considerations for tribal members.

Response: The FWS supports hunting as a priority public use when determined compatible on a refuge-specific basis with refuge purposes and the NWRS mission. Hunting on the Monument is compatible with the purposes of the Monument and the resources to be protected (see the Hunting Compatibility Determination in Appendix I). This is reflected in the preferred alternative, which allows for the expansion of hunting should the status of lands under DOE control change.

¹⁸¹ According to the University of Washington Astronomy Department, the Rattlesnake Mountain telescope is not the largest in the state of Washington, although it is the largest of a certain, narrowly defined type.

In response to specific points, the FWS does not believe a permit system is needed at this point, although that remains an option into the future should the need arise (e.g., if there is too much hunting pressure). All hunting on the Monument is done in accordance with WDFW regulations, but the FWS must retain the option to be more restrictive to protect resources, to comply with FWS policies, or meet the purposes of the Monument. One example is the use of temporary blinds, which are allowed under WDFW regulations and on the Monument; however, blinds on the Monument may not be constructed from live vegetation in order to protect the habitats denoted in the Monument Proclamation. Likewise, the WDFW allows for pheasant releases; however, pheasant releases on the Monument are not allowed as the introduction of non-native species is contrary to FWS policy (601 FW 3.14F. and 3.16B). In other instances, FWS policy and the resource protection goals of the Monument are in perfect concert with WDFW regulations and programs. For example, under the preferred alternative, additional lands may be opened for upland bird hunting, but the lands around Saddle Mountain Lake fall within a long-standing WDFW waterfowl sanctuary and will remain closed to hunting. Additionally, in the case of waterfowl hunting, limits are established nationally in coordination with states based on a harvestable surplus and are not set by the WDFW or the Monument.

With respect to tribal hunting and access, all treaty rights will be honored. Tribal hunting will be conducted in accordance with these existing treaties, national and state laws, and DOE and FWS policies and procedures (see Section 2.3.1). As land management changes, all access and use issues will be developed as per above and in consultation with Native American tribes.

Hunting – Oppose

Comments: Several comment letters stated that hunting is incompatible with resource protection, research on the Monument, and/or the purposes of the NWRs; many of these writers also felt that hunting is morally wrong. Others would allow for hunting, but had specific suggestions on how to improve the program or protect resources, including: 1) Disallowing hunting above the ordinary highwater mark on islands; 2) not allowing the use of blinds; 3) discontinuing the WDFW's pheasant stocking program; and 4) not herding/trapping wildlife via aircraft or motor vehicle.

Response: The U.S. Congress has identified six wildlife-dependent public uses (including hunting) which are to be given special consideration in planning for and management of national wildlife refuges. When determined compatible, such uses are to be encouraged. Although some members of the public find hunting to be morally wrong, others recognize it as a traditional use of a renewable natural resource which provides the user with an enhanced appreciation for, and understanding of, fish, wildlife, plants and their habitats. The FWS manages national wildlife refuges, including associated public uses such as hunting, consistent with this congressional direction (see 16 U.S.C. 668dd-668ee). On the Monument, hunting has been found to be compatible with the purposes of the Monument and resource protection needs (see the Hunting Compatibility Determination in Appendix I); this is reflected in the preferred alternative. The compatibility determination addresses the parameters under

which hunting is compatible. These parameters include: 1) Blinds can be used as long as they are not constructed from live vegetation; 2) hunting above the highwater mark on islands is not compatible with resource protection (hunting below this point does not fall under the jurisdiction of the FWS); 3) and pheasant stocking must be discontinued as introduction of non-native species is contrary to FWS policy (601 FW 3.14F. and 3.16B). When hunting on the Monument, the use of aircraft and motor vehicles for herding/trapping is not allowed under state or federal law; however, these are accepted wildlife management methods in certain situations and under certain circumstances, and the FWS may need to use herding in efforts to control wildlife populations (see Section 2.10.1.5, Objective C-9: Wildlife Population Control).

Hunting – Other

Comments: A few comments were received that were not directly related to a position on hunting. These included: 1) a requested clarification on the meaning of the “hunting enclosure” on Map 11 (now Map 13); 2) a request to specify all hunting seasons on the Monument between September and March; and 3) a questioning of whether or not the FWS has adequate personnel to oversee a hunting program.

Response: Areas where hunting is not permitted, but other public uses are, are identified as “hunting enclosures” (this has been defined in Sections 2.9.2.4.3 and 2.9.2.4.6). At present, individual hunting seasons, bag limits, and take are defined by the state of Washington as published in the annual WDFW Big Game and Migratory and Upland Game Pamphlets. This CCP will establish the areas open/closed to hunting, although changes will first need to be codified in federal regulation. Likewise, variations from state regulations will be identified in federal regulations and, with the help of the state of Washington, in the annual WDFW game pamphlets. The specifics of hunting on the Monument are defined in the existing Sport Hunting Plan, although some modifications will likely be necessary with approval of the final CCP. This Sport Hunting Plan has already established that the Monument has adequate personnel to oversee the hunting program.

Elk Populations and Population Control

Comments: The Monument’s elk herd remains a focus of controversy, mostly over the size of the elk population and its corollary depredation of field crops on farms adjacent to the Monument. Several comments received stated that herd size should be based on the carrying capacity of the Monument and that a biological carrying capacity study for the Monument and adjacent lands should be undertaken. A few letters noted that input from local landowners should be considered as to the size of the herd and that plans for herd size management should be included in all alternatives. Other writers focused on specific elk management methods, including: 1) Elk hunting should be allowed on the ALE (Rattlesnake Unit); 2) elk should be relocated if the population becomes too large; 3) government hunters should be used to cull the elk herd; and 4) hazing, baiting, or fencing should be

used as a means of elk control. Finally, a couple of letters stated that the cost to local landowners related to management of elk should be reimbursed by the FWS.

On the other hand, numerous writers did not believe the elk herd is a problem, or that it should be controlled. These letters expressed almost exactly the opposite opinions from those noted above, including: 1) Elk hunting should not be allowed on the Monument; 2) trapping and relocation are not cost or biologically effective; and 3) Government hunters should not be used to cull the elk herd.

Response: The FWS is also committed to working with the WDFW on all wildlife populations and supports the recommendations of the WDFW's Rattlesnake Hills Elk Strategic Management Plan (February 2000) and Yakima Elk Herd Plan (December 2002). These plans call for a population size of 350 or less elk in the Rattlesnake Hills Elk Herd. These plans were developed, and are revised, through a public process whereby all parties (e.g., landowners) participate in determining herd size. In support of these plans—and as good wildlife management practice—the CCP includes the full range of population control measures under each alternative, including the preferred alternative. Included within these measures are most of the suggested strategies. Although the DOE has found elk hunting for recreation is not in line with its goals for the ALE, the FWS believes an elk population control hunt could be a useful management technique in the future.¹⁸² Relocation is a management option and is been included in the range of population control methods covered by the CCP, as has the use of government employees to cull the elk herd and fencing to control it. These are actions that the FWS could undertake and fund on the land the FWS manages. Regulations do not allow for baiting and the hazing of wildlife from federal lands. Management of elk on non-federal lands is the jurisdiction and responsibility of the WDFW.

Island Access

Comments: Access to islands in the Columbia River, both those within the Monument and several that are part of the McNary National Wildlife Refuge but addressed in this CCP, generated several letters, both in favor of keeping the islands closed and in favor of opening them to numerous uses. Several letters expressed a desire to open the islands to boaters (for the beaches) and hunters year round, while a couple of letters stated that seasonal closures would be sufficient. Respondents who acknowledged that FWS jurisdiction ends at the ordinary high water mark requested that this be made clear in the CCP and understood the closure only applies to areas above that point. Other writers wanted management of islands to be consistent between the Monument and the McNary and Umatilla National Wildlife Refuges.

Response: For reasons outlined in the CCP/EIS (see Chapters 2 and 3), the FWS has determined that the islands should be closed above the ordinary high water mark to protect natural and cultural

¹⁸² A recreational elk hunt has been found to be a compatible use of the Monument north of the Columbia River in areas open to the public.

resources. The CCP clearly identifies island access will be maintained below the ordinary high water mark and that hunting and fishing can continue below that point. This continued closure has been coordinated with those of the McNary and Umatilla National Wildlife Refuges, and island access is consistent across all refuges, to the extent possible or practical.

Monument Access

Comments: The FWS received numerous comments regarding access to the Monument. Most of these comments were quite specific as to areas, type of access, or uses allowed. Of the general comments received, several stated public access to the Monument should be increased, while others stated that public access should not be increased. Another suggestion was that all public access and recreational activities should be guided by Goal 7. A couple of letters stated that all areas open to, or being considered for, public access should undergo comprehensive biological inventorying. One writer proposed limiting human trespass/development for wildlife preservation through a firmly established maximum number of visitors per year. Others stated that the accommodation of public use should not decrease the allocation of budget resources for conservation management, while others did not want to see any fees for use.

Response: The FWS has concluded that the Monument can support additional access to certain areas, as outlined in Chapter 2, and the preferred alternative opens additional areas, pending DOE approval under cleanup operations. All access is guided by the ten management goals identified for the Monument, although some balancing of management between the goals will be necessary; the preferred alternative strikes the balance the FWS believes is appropriate for the Monument. All areas will be subject to some form of monitoring, even if it is only observation by professional biologists; monitoring is a component of all resource management goals under all alternatives.¹⁸³ At this time, demands and impacts on resources are not sufficient to warrant imposing use limits. The FWS will monitor public use, and should use levels reach a stage where resources are being unduly impacted, the FWS will work with the public and local governments to implement appropriate protections. While protection of Monument resources is paramount, providing for public use and enjoyment of the Monument is also important. The FWS believes the preferred alternative does the best job of balancing public use with resource protection. At this time, no fees are being planned. However, this could change for operation and maintenance of certain facilities (i.e., fee demonstration site).

Comments: Among areas with access specifically identified:

- 1) Keep access to the top of Saddle Mountain.
- 2) The entire Wahluke Slope should be open to public access.

¹⁸³ The more administrative resources available, the greater the extent of inventorying and monitoring possible. The FWS will have to make informed trade-offs with limited budgets and staffing.

- 3) Open access to the Benton County side of the river.
- 4) Rattlesnake Mountain should be open to public access. A variation of this comment was that the McGee Ranch (west end of the Rattlesnake Unit), including the Umtanum Ridge, should be open to public access.
- 5) Public access of the Riverlands area (the area immediately adjacent to the Columbia River south and west of the Vernita Bridge) should be allowed to continue, including designated roads and trails. The Vernita area west of State Route 240 should be open to public access.
- 6) Provide road, trail and/or boat access to B Reactor.

Response: In the same order as presented above.

- 1) Access to all of Saddle Mountain is provided for in the preferred alternative.
- 2) The preferred alternative opens the entire area to some form of public access, pending DOE release of areas from safety considerations.
- 3) The preferred alternative calls for limited, controlled access, budget and agency resources permitting. As the DOE releases lands for possible public access, the FWS will work with the DOE to provide appropriate access.
- 4) The FWS has determined that the entire Rattlesnake Unit should be closed to unrestricted public access due to resource concerns, as outlined in Chapter 2.
- 5) Currently, there are no designated trails in the area; all trails are ‘social’ trails. The DOE has determined that the area on the south side of the river should be closed due to security concerns, and the CCP reflects that decision. The area on the north side of the river is open and would remain so under the preferred alternative (see Chapter 2 for specific details).
- 6) Should the B Reactor become a publically accessible resource, the FWS will work with the DOE and other agencies (e.g., NPS) to ensure proper access.

Comments: Among the type of access specifically identified:

- 1) Off-road vehicles should be restricted on the Monument.
- 2) Only allow low-impact recreational activities.
- 3) Any management plan selected must be compliant with the Americans with Disabilities Act.

Response: In the same order as presented above.

- 1) The Monument Proclamation prohibits motorized and non-motorized off-road vehicles.
- 2) For the most part, the CCP is centered around low-impact activities. However, in accordance with the concepts behind Alternative C-1 (the preferred alternative), certain areas will have high concentrations of use (e.g., around boat launch areas). This is in order to minimize impacts elsewhere.
- 3) Implementation of the CCP will be in compliance with the ADA, although many of the finer details will not emerge until subsequent stepdown plans are written.

Comments: Among the uses allowed in certain areas specifically identified:

- 1) The road from the observation point across the White Bluffs should remain open for non-motorized use.
- 2) Limit access to Rattlesnake Mountain for educational or maintenance only.
- 3) Open access to Saddle Mountain Lakes for recreational fishing.

Response: In the same order as presented above.

- 1) The road will remain open as long as the road remains safe for public access.
- 2) Due to resource concerns, the preferred alternative limits public access to guided tours, conducted by either the FWS or FWS-trained docents.
- 3) The Saddle Mountain Lakes are managed by the BOR as a valid existing right. The FWS will work closely with the BOR to evaluate public use and access (e.g., fishing) on the Saddle Mountain Lakes. If it is determined that fishing can be safely conducted, and in accordance with DOE releases of lands to other uses, the BOR and FWS may allow fishing in the Saddle Mountain Lakes.

Trails

Comments: As already evidenced, access to the Monument generated by far the greatest interest and number of comments. While most of these were over boat access, numerous comments addressed trails. Some writers would like to see a wide variety of trails and trail uses—hiking, trail running,

mountain biking, and snowshoeing trails.¹⁸⁴ Other comments were focused on specific trail locations: 1) Along Rattlesnake Ridge from Horn Rapids to the Vernita Bridge; 2) along the crest of the White Bluffs traversing the entire Hanford Reach; 3) from the White Bluffs Boat Launch to the Saddle Mountains crest; and 4) interpretative trails at the Saddle Mountain Overlook and Rattlesnake Mountain. Several writers stated that trails on the Monument should be part of a larger interconnected “trail system.”

While most of the comments received were in support of trails, there were a few that wanted limitations, or had concerns over resource protection. Comments ranged from the idea that expanding the hiking trails is excessive and not compatible with protecting resources to allowing for trails but limiting them (and all uses) to one side of the Columbia River. Others were focused on specific trails: One writer thought that a proposed trail corridor on the McGee Ranch (Rattlesnake) Unit may be too close to the endemic plant Umtanum desert buckwheat population and that a proposed trail(s) in the Hanford Dunes area may negatively impact the state’s largest population of gray cryptantha. In any event, this writer stated that all trails should be developed in consultation with rare plant biologists and herpetologists.

Response: The preferred alternative allows for development of trails systems.¹⁸⁵ However, the exact location, number, design, etc., will be part of a subsequent Visitor Services Plan, not the CCP. The step down planning process will involve the public and existing plans, such as Benton County’s Trail Plan, in identifying the appropriate trail configurations and uses. This includes the possibility of one or more trails on the Rattlesnake Unit and interpretive trails there and throughout the Monument. All of the Monument’s trails will be designed with the idea of tying into other trail systems (e.g., Benton County, state of Washington) where feasible, appropriate and compatible.

The FWS has concluded that trails can be developed which allow for public use while protecting Monument resources, as analyzed in Chapter 4. While most trails would be on the north side of the river, due to most open areas being on that side, where appropriate and possible, trails on the south side of the river would be considered. For example, a trail through a portion of the Hanford Dunes area would allow the public to enjoy this unique resource. All trails would be sited in environmentally acceptable locations through development of a step down Visitor Services Plan. This includes protection of all rare or sensitive plants and animals. To help ensure this protection, trail development would be a public process, and all appropriate experts would be consulted.

¹⁸⁴ Trail running is not an appropriate use of national wildlife refuges.

¹⁸⁵ The Monument Proclamation prohibits off-road biking; biking is only allowed on roadways. Certain roadways will be incorporated into the Monument’s trail system.

Motorized Road Access

Comments: While few letters focused on motorized access to the Monument, those that did had specific ideas about that access. Among those comments was that there should be automobile access to the top of Rattlesnake Mountain, the Hanford Dunes, and to parts of the Monument's interior for the elderly. On the other hand, a few writers felt that motorized access (including helicopters) should be limited throughout the entire Monument. Another writer wanted to see the road between the locked gates (north of the Ringold Fish Hatchery, upstream of the Hanford Ferry landing) be reconstructed to complete the road east of the Columbia River, allowing for loop travel.

Response: Due to resource and public safety concerns, as outlined in Chapter 2, the FWS and DOE do not intend to open the Rattlesnake Mountain Road to general public access. Resource concerns also are the reason that the FWS does not propose to open motorized access into the Hanford Dunes. However, access to a hiking trailhead in the Hanford Dunes is a possibility (to be addressed in a step down plan), pending DOE and Energy Northwest concurrence on public safety issues. Most of the available roads within the Monument's interior are open to use under the preferred alternative; the FWS is limited to additional motorized access by the current road configuration.

The FWS believes, as addressed in Chapter 4, that some level of motorized access is possible while still protecting Monument resources. The preferred alternative, which provides for essentially the current levels of road access, will be sufficient to provide public access while first protecting resources. All aircraft are limited to a 1,000 foot over the Monument by the FAA.

Due to safety concerns (over the current landslide location), budget constraints (for moving the road), and resource protection needs, the preferred alternative recommends continuation of the current situation, where access between the locked gates on the Ringold River Road through the area is by foot, horseback, or bicycle. Currently, all but the three miles between the locked gates are accessible by automobile, including for those with limited mobility.

Camping

Comments: Several letters discussed camping on the Monument, ranging from not allowing camping to providing spaces for recreational vehicles. A couple of letters identified specific locations for campsites—including the Hanford Dunes, along Highway 24, at the Ringold and Vernita boat launch areas, and at Sacagawea State Park¹⁸⁶—while others wanted camping throughout the Monument. However, the vast majority of letters related to camping for floatboaters. While a couple were opposed to the idea, or wanted the sites open to all boaters, most of these letters wanted floatboater campsites

¹⁸⁶ Sacagawea State Park is not part of this CCP and is not near the Monument.

midway along the Hanford Reach. Specific ideas presented included limiting camping to a few days at a time and the establishment of a permit system.

Response: The FWS thoroughly considered allowing camping on the Monument. However, other than camping for floatboaters due to public safety concerns, camping was not found to be an appropriate use of the Monument (see Appendix H). Specifically, camping is not conducive to resource protection needs. There are also numerous other camping opportunities in the vicinity of the Monument.

The one exception to camping on the Monument is in support of floatboating, which in turn is supportive of several “Big 6” wildlife-dependent activities. If funding becomes available, such facilities could be provided in order to accommodate family-oriented wildlife-dependent recreation and to provide for public safety. The entire Hanford Reach often cannot be traversed safely in one day, especially by families.¹⁸⁷ Without providing for a limited number of reservation-only campsites for floatboaters, an entire segment of the public would be excluded from boating on the river. All use would be at designated sites, allocated through a lottery/permit system, and be for one night only to provide for public safety. This option is included in the preferred alternative.

Other Comments

Although most of the comments received were focused on the topics already addressed, the public, Native American tribes, and other agencies provided comments over a broad range of topics.

Other Recreation and Recreation Facilities Comments

Comment: Recreational opportunities should not be restricted on the Monument.

Response: As noted elsewhere, resource protection is the primary responsibility of the FWS. All public uses must be appropriate and compatible with protection of resources (see Appendices H and I).

Comment: The forms and locations of recreational activities should be compatible with high standards of resource protection.

Response: By FWS policy, recreation activities must be found appropriate (Appendix H) and compatible (Appendix I) with the purposes of the Monument before lands can be open to such uses.

¹⁸⁷ Powerboat users can safely access and exit the Monument within one day.

Comment: Dogs should be allowed off-leash.

Response: Dogs allowed off-leash, and not in support of a wildlife-dependent activity (e.g., hunting), was found to be not appropriate under the Appropriate Uses analysis (see Appendix H) and are not consistent with resource protection.

Comment: Sporting dog field trials should be allowed.

Response: Most of the activities associated with field dog trials have been found to be either inappropriate or incompatible with Monument purposes, for example, off-trail horse use, camping, use of non-native species (see Appendices H and I).

Comment: Several suggestions were made to improve recreation:

- Provide sufficient receptacles for litter control in any area of frequent public access.
- Include an unmanned interpretive center at the Vernita Rest Area.
- There should be fewer interpretive signs and trails.

Response: Details like this will be addressed in step down plans, such as a Visitor Services Plan. These comments will be retained for consideration at that time.

Comment: The number of parking areas should not be reduced. Closure of the Ringold parking lots would not reduce maintenance costs.

Response: Several parking lots are underutilized and create avenues for the spread of noxious weeds, as well as causing the need to expend funds that could be best used elsewhere. The closure of two little-used parking lots in the Ringold Unit—none providing boat access—will help reduce maintenance costs and the spread of noxious weeds. Additional parking facilities will likely be constructed in other areas to accommodate public use.

Comment: The size of the parking areas should be increased to accommodate trucks with horse trailers.

Response: This is a detail best addressed in either a Visitor Services or Equestrian Plan.

Comment: Revise map 20 to show the Yakima River and boat launch sites along the river, including Benton City, Horn Rapids Park, Snively Road and Hyde Road.

Response: Due to boat passage impediments along the Yakima River, the FWS does not believe the suggested map modifications are warranted. Map 20 reflects the boat launches that are typically used to access the Hanford Reach.

Comment: The Hanford Reach should be included in the Columbia River Water Trail System.

Response: The FWS has taken tentative first steps to have the Hanford Reach be recognized as a water trail.

Comment: Scientific research should have priority over recreation.

Response: The FWS believes both research and recreation are important and can be accommodated on the Monument. Scientists will have areas like the Rattlesnake Unit to conduct research by permit, while public use can be provided for elsewhere. That does not mean that any use is exclusive of another in any area. For example, research, especially that benefitting the Monument, can be conducted anywhere on the Monument, while limited public use will occur on the Rattlesnake Unit.

Comment: Section 4.13.1.3 acknowledges an increased risk of vandalism on utility facilities associated with those alternatives providing trail and boat launch facilities (page 4-184). However, no measures to mitigate this adverse effect are proposed. We suggest considering the location of utility infrastructure when planning visitor facilities, similar to the proposed best management practices for avoidance of sensitive resources described in Section 4.0.1.2.1).

Response: The change has been made.

Staffing, Budgets and Administration

Comment: Adequate staff and budget should be provided to ensure protection of resources.

Response: The FWS has developed staffing plans to meet the objectives of each alternative (see Chapter 2). The FWS believes the identified staffing levels would provide for public use while protecting the Monument's resources. However, these are optimum staffing levels; near-future budget projections suggest it is unlikely that such levels could be reached for several years.

Comment: Funding should be adequate to meet environmental, safety and staffing needs and to monitor open and closed areas.

Response: The FWS agrees. However, there are many equally important national priorities competing for funding. Staffing is a function of funding, which is a function of the congressional appropriation process. However, if it is believed an area cannot be adequately managed to protect resources with existing staff, by policy it would be closed to public use. At this time, the FWS believes it has adequate staff to keep various areas of the Monument open to public use.

Comment: There should be increased patrols of the Monument and the implementation of fines for those who violate the rules.

Response: The staffing chart in Chapter 2 reflects a desire for additional law enforcement personnel, and if funding becomes available, staffing would be increased. Fines are set by federal and state laws and policies.

Comment: The staff should include a geologist.

Response: If the writer is referring to the current staff, funding and other concerns do not allow for a geologist at this time. If the writer is referring to the future as envisioned by the CCP, most alternatives include a geologist (see the staffing chart in Chapter 2), including the preferred alternative.

Comment: The administrative offices should not be relocated.

Response: In line with national and regional needs and cost-savings, the office will be relocated to Burbank, Washington (McNary National Wildlife Refuge).

Geological and Paleontological Resources

See also specific geological comments at the end of this appendix.

Comment: The CCP/EIS does not adequately address the geologic and paleontologic resources.

Response: The writer did not provide additional rationale around which to respond further.

Comment: Numerous papers exist for additional information on geologic resources. These should be included in the CCP.

Response: The Monument Proclamation identified the geologic resources that must be protected. The CCP addresses those resources and their protection, albeit at a landscape scale. The additional information provided will be retained to be used in step down plans that specifically need that level of detail.

Comment: The slumping of White Bluffs is due to excess irrigation water diverted to ponds and unlined canals behind the bluffs.

Response: While this is likely the cause (see Chapter 3), until additional studies are conducted, the exact cause, and likely remedies, cannot be fully determined. This issue has been determined to be outside the scope of this CCP/EIS.

Comment: The CCP should include a plan for protecting the White Bluffs from landslides.

Response: Landslides are a serious problem, and a comprehensive study by the USGS has been recommended. As noted elsewhere, this issue has been determined to be outside the scope of the CCP process.

Comment: Daily fluctuations of river levels exacerbate bank erosion at Locke Island.

Response: While this is likely occurring, issues related to management of the Columbia River system are outside the scope of this CCP and are addressed through other means (see Chapter 3).

Invasive Species and Noxious Weeds

Comment: The FWS needs to work with partners (local organizations, counties, etc.) on an appropriate noxious weed control program.

Response: The FWS already does this, and every alternative in the CCP includes objectives to expand these partnerships and programs.

Comment: Insufficient response to invasive species may result in irreversible harm to resources.

Response: The FWS agrees and will continue to implement the IPSIMP.

Comment: The costs to local landowners of noxious weed and fire control should be reimbursed by the FWS.

Response: By law and policy, all federal landowners must be involved in noxious weed management, including the FWS. The FWS will follow all regulations to meet its obligations concerning noxious weed management. The FWS has existing management plans to control noxious weeds and fire; the public was involved in their development and will be invited to provide input on future revisions.

Fire Management

Comment: Authorize fire protection to protect the lives and property of those who live and work around the Monument.

Response: The FWS works in partnership with numerous local fire programs and agencies to protect life and property.¹⁸⁸ The FWS and partners will undertake all reasonable measures to protect the public and property.

Comment: The FWS should review and revise the Fire Management Plan sooner than five years.

Response: The FWS Fire Management Plan is a living document and is subject to change and modification within the five years.

Comment: Fire breaks should be created along all roads.

Response: All roads are considered firebreaks. In addition, most Monument road rights-of-way are treated (e.g., mowing, spraying) to widen the fire break and enhance fire protection. Most public highway rights-of-way through the Monument are disked to enhance fire protection.

Comment: Retain water collection/pumping facilities at the foot and/or summit of Rattlesnake Mountain for fire/life protection.

Response: The existing water storage on the Rattlesnake Unit will be maintained.

Comment: Include impacts to special status species resulting from fire prevention and fire fighting activities.

Response: These impacts are addressed in Chapter 4, albeit briefly. They are considered at greater length, appropriately, in the existing Fire Management Plan, and they will be further addressed when the plan is revised.

Biological Resources and Management

See also specific comments of the WDNR at the end of this appendix.

Comment: The FWS should complete a biological inventory of the entire Monument and develop a related monitoring plan.

Response: TNC completed a biological inventory and analysis of the Hanford Site, published in 1999. The FWS and TNC have continued to build on this inventory since that time and will continue to do so into the future. All management goals and alternatives, including the preferred alternative, include a monitoring component.

¹⁸⁸ FWS policy mandates that the first priority in firefighting is to protect firefighters and the public. The FWS is not authorized to combat structural fires.

Comment: Monitoring of rare or sensitive species on islands, in the riparian areas of the Columbia River Corridor Unit, and on the Hanford Dunes should be conducted. Of special note, the White Bluffs bladderpod should be monitored on the Wahluke Unit to determine the response of the plants to management actions.

Response: Monitoring of rare plant and animal species will occur throughout the Monument, possibly as a cooperative effort with other agencies and groups. Monitoring of the White Bluffs bladderpod will continue; current plans indicate monitoring every three to five years. The most recent monitoring was completed in 2007.

Comment: The source for rare plant occurrences should be referenced.

Response: The FWS has repeatedly listed the WNHP, TNC, PNNL and FWS as the source for the status of rare plants within the Hanford Site. If the commenter was referring to some other usage, insufficient detail was provided to make changes to the CCP.

Comment: Restoration of riparian structure and function affords a high “payoff” in habitat value, and this restoration should be considered under all alternatives.

Response: All alternatives provide for riparian restoration. The differences are in the level of annual restoration efforts.

Comment: Clarify if riverine emergent wetland species are more significant than upland species on page 2-56.

Response: The FWS assumes the writer is referring to the protection of rare plant populations. If so, the FWS has an obligation to protect rare plant populations wherever they are found on the Monument, and one area is not more important than another.

Comment: The CCP/EIS does not adequately address fishery resources.

Response: The writer appended several pages of technical data on the Columbia River fishery that were submitted to other FWS offices that are directly involved in management of fishery resources. As the Monument does not have direct management responsibility over the Columbia River or the fishery, the facts presented are outside the scope of the CCP and are best addressed through these other offices and programs.

Comment: Avoid the use of “listed” when pertaining to species of concern.

Response: The CCP has been amended to reflect this, except where common word usage indicates otherwise.

Comment: The use of the word “severely” with regard to Chinook spawning habitat impacts is unfounded and conflicts with acknowledgment of healthy habitat later in the same sentence.

Response: The FWS cannot find this reference within the CCP/EIS.

Comment: The CCP should acknowledge that the FWS signed the Hanford Reach Fall Chinook Protection Program Agreement; add the FWS and Yakama Nation as signatories to the Hanford Reach Fall Chinook Protection Program Agreement in the footnote on page 3-72.

Response: The CCP has been amended to reflect this.

Comment: Add an objective to work with Mid-Columbia Hourly Coordinating Group on any proposed changes to river flow operations.

Response: There are no proposed changes to river flow operations resulting from this CCP.

Non-treaty Valid Existing Uses

Comment: The water pumping and transmission systems within the Monument must not be negatively affected by Monument management or operation.

Response: The systems related to the BOR’s Columbia Basin Project are considered a valid existing right under the Monument Proclamation; the systems on the Monument will not be negatively impacted.

Comment: No closures are required to protect transmission towers from climbing or trespass.

Response: The CCP/EIS does not suggest that any closures are needed to avoid climbing on transmissions towers. Nor is trespass a problem in and of itself requiring any closures. However, protection of sensitive transmission equipment—a valid existing right under the Monument Proclamation—may be needed in certain areas, at certain times, and/or under special circumstances.

Comment: Allow operation of new or modified facilities at the 400 Area.

Response: The CCP would not impact the DOE operations in the 400 Area.

Comment: Evaluate the existing wells for potential use.

Response: Due to public safety concerns, the FWS does not have any plans to use any of the existing wells; most “wells” are actually water quality monitoring facilities. Furthermore, most of the wells

that currently exist are located in the Rattlesnake Unit or on DOE lands within the river corridor on the south shore, which are closed to general public use.

Issues Outside the Scope of the CCP

Comment: Any plans for the Monument must not impact payments in lieu of taxes (PILT).

Response: The FWS is not aware of how any portion of the CCP would impact PILT. At this time, the only action that the FWS is aware of that may impact PILT would be a change in land ownership, which is outside the scope of this CCP.

Comment: The Black Rock Reservoir may affect water levels in the Hanford Reach.

Response: Black Rock Reservoir, like all river flow issues, is outside the scope of the CCP and will be addressed through other processes and divisions of the FWS.

Comment: The EIS does not adequately address hazardous material contamination or cleanup.

Response: This issue is outside the scope of the CCP, is under the purview of other agencies, and has been—and is being—addressed through other processes and procedures.

Boundaries

Comment: The EIS should address the areas that have been cleaned up and might be included in the Monument in the future.

Response: At this time, there are no plans to expand the national wildlife refuge,¹⁸⁹ and the future land disposition plans of the DOE are unclear; the CCP only addresses lands within the Monument. Should additional lands be considered in the future, additional or supplemental NEPA coverage would be needed. Likewise, the CCP would be supplemented at such time as appropriate.

Comment: Boundary issues at the Horn Rapids Enclaves needs to be resolved.

Response: The Horn Rapids Park is not part of the Monument, and therefore any issues related to the park are outside the scope of this CCP.

¹⁸⁹ The Monument can only be expanded by the President or Congress. However, it must be remembered that the Monument is also a national wildlife refuge, and the FWS could undertake management of additional lands as part of the NWRS.

Comment: Denote private boundaries more distinctly on mapping, fence boundaries, and areas that are susceptible to frequent trespass.

Response: Details on signing and public information will be addressed in either a Visitor Services or Signing Plan. This comment will be retained to be addressed at that time.

Cultural and Archaeological Resources

Comment: The CCP does not adequately address the risk to cultural/archaeological resources.

Response: The FWS acknowledges that specific details concerning cultural resource management are lacking from the CCP. This is by design; the FWS has identified the creation of a cultural resources management plan as a top priority. This step down plan will provide specific management direction for all cultural resources.

Comment: The White Bluffs Ferry Landing should be preserved as an historical monument for families impacted by the Manhattan Project.

Response: Under the preferred alternative, the FWS has no immediate plans to alter the landing. If, at some point in the future, it becomes necessary to make modifications to the landing to accommodate public use, the FWS will make every reasonable effort to be sensitive to the needs of earlier inhabitants of the area.

Comment: Historically significant structures such as the B Reactor and the old Hanford School should be preserved.

Response: The FWS supports the preservation and interpretation of these and other structures related to the Manhattan Project. However, these structures are outside the Monument boundaries, and the FWS has no management responsibilities for them.

Comment: It is stated that five to fifteen archaeological sites and historic structures should be inspected semi-annually. Why 5-15, and how has this number been determined? Does this mean, for example, that two buildings and three archaeological sites will be inspected? Without some explanation, this figure and recommendation seem entirely arbitrary. It also implies that only 5-15 sites merit inspection, while there are other known archaeological sites and historic properties worthy of yearly inspection.

Response: The number was based on the best professional judgement of a staff archeologist as to what could realistically be accomplished given funding and time limitations. The FWS does not consider one site inherently more important than another. Additional detail and identification of sites will be provided in a subsequent step down Cultural Resources Management Plan.

Comment: The bibliography does not show consultation of major historic properties documents prepared for Hanford (Harvey and Battelle).

Response: The Literature Cited (Appendix T) only lists documents and sources the FWS used in preparation of the CCP. It is not intended to be a bibliography and was mistakenly noted as such in the Draft CCP; the correction has been made.

Tribal Issues

Comment: The CCP/EIS does not adequately address tribal treaty rights.

Response: The CCP is very clear—and states it numerous times—that existing treaty rights will be honored in accordance with FWS policy.

Comment: The final CCP/EIS should include the process used to consult with affected tribes, outcomes of such consultations, and how tribal issues were addressed.

Response: Tribal consultation is addressed in Chapter 5.

Working With Others

Comment: There should be opportunities for volunteers to be involved with managing/ maintaining the Monument.

Response: The FWS will continue to make extensive use of volunteers.

Comment: The FWS should include the Ice Age Floods Institute as a consulting organization.

Response: The FWS provided for extensive public involvement in the development of this CCP, including the opportunity for all organizations to be involved. The FWS will continue to partner with the Ice Age Floods Institute on other projects (e.g., Hanford Reach Heritage and Interpretive Center, Columbia National Wildlife Refuge, development of interpretive trails).

Comment: Combine the second and third visual impacts strategies to read: “Seek cooperation with those agencies carrying out projects and activities within the Monument to develop design standards and guidelines for structures and utilities to be built that would minimize visual impacts to the Monument.”

Response: The second strategy has been modified to reflect the desire of the FWS to work in cooperation with affected organizations in developing design standards.

Comment: The FWS should work with the BPA on the Implementation MOU agreed upon in the Letter of Agreement dated March 31, 2005.

Response: Until an ROD has been signed for this CCP, the FWS does not have final direction on what to implement. Following the ROD, the FWS will be in a position to work on the MOU.

Comment: Clarify the roles and responsibilities of other entities outside of the FWS and DOE.

Response: Other agency roles have been defined to the extent needed for the CCP.

Comment: The ACOE identified a specific office to discuss partnerships related to management of fish and aquatic habitat.

Response: The FWS thanks the ACOE for its offer and will pursue this offer as appropriate.

Comment: Clarify if “jurisdiction” means “authority” on the Monument.

Response: These terms have been defined in the glossary.

Comment: Section C.1.3 does not include a discussion of Section 404 of the Clean Water Act (page C-5), nor Section 10 of the Rivers and Harbors Act. Please be aware that Fish and Wildlife Service may be required to obtain a Department of the Army permit for some types of activities described in the CCP/EIS (e.g., boat launches).

Response: The FWS is fully aware that permits under either act may be necessary for construction activities within waters of the United States. Section C.1.3 has been changed to mention these acts.

Specific Editorial Comments

The ACOE suggested the following editorial corrections:

- Section 1.10.3, first paragraph: Use of the term, “cultural artifacts” is misleading. It should state, “The historic buildings and structures, including industrial and operational artifacts, associated with the Manhattan Project . . .” (**Correction made.**)
- Section 2.10.6.4: Change “National Register of Historic Sites” to “National Register Listed and Eligible Properties.” (**Correction made.**)
- Section 2.10.6.4, Rationale and Strategies: This paragraph is confusing where it states that the site has experienced, “the removal of nearly all historical structures.” It would be better to reword to, “Since many historic properties have been removed over time, those that remain,

including buildings, structures, and historic and prehistoric archaeological sites should be fully evaluated for National Register eligibility.” **(Correction made.)**

- Section 3.20.3: This Section is inappropriately titled. It should be “National Register Listed and Eligible Properties.” **(Correction made.)**
- The explanation of “historic districts” is somewhat misleading. An historic district is a catch-all term for concentrations of resources—prehistoric archaeology, historic archaeology, historic buildings, historic structures, objects, landscapes, etc. The Monument has several National Register listed historic districts, most of which are archaeological in nature. **(No correction necessary.)**
- Page 3-194, top paragraph: It states that 127 sites have been evaluated. It should be clarified whether all of these 127 sites/properties are considered eligible for listing in the National Register, or whether only some of these 127 sites are considered eligible. Are there known to be other eligible sites and districts, beyond the known 127 sites? **(The CCP has been rewritten to attempt to clarify.)**
- Page 3-194: Where it says, “. . . all of which are archaeological in nature and most of which comprise several sites.” Again, this is confusing. By its nature, historic districts are composed of individual sites. **(No correction necessary.)**

The WDNR suggested the following editorial corrections:

- Page 2-56: This section should perhaps also cite Caplow, F. 2003. Studies of Hanford Rare Plants, 2002. Washington Department of Natural Resources Natural Heritage Report 2003-04. Prepared for the Washington Office of The Nature Conservancy. **(Correction made.)**
- Caplow and Beck 1996 and Soll and Soper 1996 are cited but not included in the Bibliography in Appendix R. **(Correction made.)**
- Page 2-57: Reference is made to seventeen unusual taxa, but not indicated what these are, or the source of this designation. **(Correction made.)**
- Caplow and Beck 1996 are cited but not included in the Bibliography in Appendix R. **(Correction made.)**
- Soll 1999 is cited but is not included in the Bibliography in Appendix R. Possibly means Soll et al. 1999. **(Correction made.)**

- Page 3-39 (bottom paragraph): Cottonwood is described as non-native. Some species are non-native, but black cottonwood is native and an important riparian tree. **(Correction made.)**
- Page 3-40: Should Beck and Caplow 1996 be cited here? **(No correction necessary.)**
- Awned halfchaff sedge is the common name used in the text on page 3-58 for *Lipocarpa aristulata*; on pg. 3-55 and in table 3.1 it is called *Aristulate lipocarpa*. **(Correction made.)**
- Rattlesnake Mountain milkvetch is the name used for *Astragalus conjunctus* var. *rickardii* on page 3-57, called basalt milkvetch in Table 3.1. **(Correction made.)**
- *Populus trichocarpa* is now named *Populus balsamifera* ssp. *trichocarpa*. **(Correction made.)**
- *Agropyron spicatum* is now named *Pseudoroegneria spicata*. **(Correction made.)**
- Page 3-41: *Oenothera caespitosa* ssp. *caespitosa* (not var.). **(Correction made.)**
- Page 3-41: *Ericameria nauseosa* rather than *Chrysothamnus*, *Chrysothamnus* is still used for *C. viscidiflorus*. **(Correction made.)**
- Page 3-41: *Achnatherum hymenoides* rather than *Oryzopsis*. **(Correction made.)**
- Page 3-41: *Hesperostipa comata* rather than *Stipa*. **(Correction made.)**
- *Hypericum majus* is called Greater Canadian St. John's wort in Table 3.1, but just Canadian St. John's wort on page 3-59. Either one is okay, but since the list is alphabetical by the first word, it makes it hard to cross reference the table and the text. **(Correction made.)**
- Page 3-42: *Poa secunda* rather than *Poa sandbergii*. **(Correction made.)**
- As noted elsewhere, *Physaria* is now recognized as the genus of what was formerly regarded as *Lesquerella*. **(Correction made.)**
- Page 3-55: Now, with the addition of *Gilia leptomeria* to the state threatened list, there are twelve species listed in Washington as threatened or endangered. **(Correction made.)**
- Page 3-56: Could reference source of this information about rare plant occurrences. **(No correction necessary.)**
- Page 3-57: Caplow and Beck 1997 cited, but not in the bibliography. **(Correction made.)**

- Page 3-58: Newcomb 1958 and Lindsey 1994 are cited but are not in the bibliography. **(Correction made.)**
- In the species treatments on pages 3-58 to 3-69, the information is presenting in a variety of formats and orders. For example, the state status may be at the beginning of the treatment or at the end, and various terms like “listed,” “considered,” or “is” are used. While consistency of presentation may sound repetitive, it would make it much easier to find specific information. **(No correction necessary.)**
- Barnaby 1989 is cited but not in the bibliography in Appendix R. **(Correction made.)**
- Hitchcock et al 1973 should be Hitchcock and Cronquist 1973 (Hitchcock et al was a different publication, published in 1969). **(Correction made.)**
- Middle of the page, sensitive does not need to be capitalized. **(Correction made.)**
- Page 3-63: Gray cryptantha is also a federal species of concern. **(Correction made.)**
- Page 3-63, last paragraph: The status in parenthesis is not done anywhere else and probably not necessary. **(Correction made.)**
- Page 3-64, under Loefflingia: (Hickman ed. 1993) is (Hickman 1993) elsewhere. **(Correction made.)**
- Page 3-64, The Oregon Natural Heritage Program 1993 is cited but not in the Bibliography. **(Correction made.)**
- Page 3-66: As noted elsewhere, sand gilia is now Washington state threatened. **(Correction made.)**
- Page 3-67: Shining flatsedge is no longer on the Washington sensitive list. It is on the watch list. **(Correction made.)**
- Page 3-69: Toothcup is lowland toothcup in Table 3.1. **(Correction made.)**
- Page 3-90, Table 3.3: In some rows the column formatting is out of line. **(Correction made.)**
- The WNHP has just completed its 2007 rare plant list revision, and one species found at Hanford, *Gilia leptomeria*, has been elevated to state threatened status. **(Correction made.)**
- A name change for White Bluffs bladderpod: *Lesquerella tuplashensis* is currently named *Physaria tuplashensis* on the WNHP list. **(Correction made.)**

- Page 3-92, Table 3.5: Washington State does not have a designation of “Species of Concern,” and to use that term here may cause confusion with the FWS designation. It would be explicit to call the table “Sensitive, Watch, and Monitor List Species,” or “Special Status Species,” as the following section is called, would be fine. Should this table be in section 3.12? **(Correction made.)**
- Page 3-92, Table 3.5: *Artemisia lindleyana* genus is mis-spelled. **(Correction made.)**
- Page 3-92, Table 3.5: *Camissonia* (*Oenothera*) *pygmaea*: Is the apostrophe a typo? **(Correction made.)**
- Page 3-92, Table 3.5: *Lindernia dubia* var. *anagallidea*: Add the word “var.” **(Correction made.)**
- Page 3-92, Table 3.5: *Penstemon eriantherus* var. *whitedii*: Add the word “var.” **(Correction made.)**
- Page 3-92, Table 3.5: *Gilia leptomeria*: As noted above, elevated in status to state threatened, so move to Table 3.3. **(Correction made.)**
- Page 3-92, Table 3.5: Called Great Basin *gilia* here, sand *gilia* on pages 3-66 and 3-42. **(Correction made.)**
- Page 3-92, Table 3.5: *Pediocactus nigrispinus*: The correct name for Washington *pediocactus*. **(Correction made.)**
- Page 3-92, Table 3.5: *Cyperus bipartitus*: Now on the Washington Watch list, rather than sensitive. **(Correction made.)**
- Page 3-92, Table 3.5: *Lipocarpha aristulata*: Threatened, on Table 3.3. Is the apostrophe a typo? **(Correction made.)**
- Page 3-92, Table 3.5: *Pellaea glabella* var. *simplex*: Add the word “var.” This is on the Washington watch list, not the threatened list. **(Correction made.)**
- Page 3-92, Table 3.5: *Eremogone franklinii* var. *thompsonii*: The genus name has been changed for Thompson’s sandwort; add the word “var.” and change status from R2 to R1.
- Page 4-61: Species are federally listed as endangered (E), threatened (T), and designated as candidates under the ESA, but designation as species of concern is more informal. Better to avoid the use of “listed” pertaining to species of concern, because saying “federally listed” does not include species of concern. The second paragraph under 4.2.5 says that federally

listed T&E and candidate species and species of concern on the Hanford Site “comprise . . . and two plant species.” There are two plant candidate species, but there are four species of concern: *Astragalus columbianus*, *Cryptantha leucophaea*, *Lomatium tuberosum*, and *Rorippa columbiae*. **(Correction made.)**

- Great Basin gilia is also now state threatened. **(Correction made.)**
- In the last paragraph of page 4-61, the common name for *Ammannia robusta* is given as grand redstem, where in Table 3.3 and 3-67 scarlet ammannia is used (grand redstem included in parenthesis on 3-67.) Likewise, in this paragraph the common name for *Calyptridium roseum* is given as rosy pussypaws, while in Table 3.3 and on 3-66 rosy calyptridium is used. There is no correct common name, but using different ones in the text and tables makes it very hard to cross-reference in the document. **(Correction made.)**
- Appendix R: Bibliography: The Washington Natural Heritage Plan was last printed in 2003, with updates in 2005. **(Correction made.)**
- Appendix R: Bibliography The Washington Natural Heritage Program rare plant list is generally revised every two years. The 2002 or 1997 lists are not necessarily correct for the present time. This document has been revised in 2007, and should be available on-line. The citation should read: Washington Natural Heritage Program. 2007. List of Plants Tracked by the Washington Natural Heritage Program. Department of Natural Resources. Olympia, WA. On-line at: www.dnr.wa.gov/refdesk/lists/plantrnk.html. **(Correction made.)**

One prominent local geologist suggested the following editorial corrections:

- Page 1-27, Section 1.10.4: As pointed out later in the document, slumping of the White Bluffs is occurring due to excess irrigation water diverted to ponds and unlined canals behind the bluffs that is seeping down to the Ringold Formation (Bjornstad 2006a). Once water encounters the impermeable Ringold Formation it moves laterally toward the bluffs; where the water seeps out along the bluffs and slumping occurs. This activity is beyond the control of the FWS since a number of federal and state agencies need to agree on the problem and address it together, which probably won’t happen anytime soon. **(Change made.)**
- Page 2-37, Table 2.1: Staff needs include a geologist for all but Alternative A and D. It seems with expanded educational and interpretive work proposed for Alternative D a geologist would be needed here more than under any of the other alternatives. **(No correction necessary. Staffing decisions were made on the basis of the alternative’s emphasis. In any event, Alternative D has not selected as the preferred alternative.)**
- Page 2-85, line 4: The statement, “The sand dunes are a result of the massive floods . . .” is false and misleading. The sand dunes are all much younger than the floods and not formed

by the floods or a direct result of the floods. The sand dunes have formed from wind reworking the uppermost flood deposits and redepositing the sand into dunes and therefore are only an indirect result of the floods. **(Change made.)**

- Page 2-85, line 6: I disagree with the statement “much is known about the Monument’s geological and paleontological resources . . .”. While much is known about the geology beneath the Hanford Site, much less is known about the geology beneath the Monument. **(Change made.)**
- Page 2-93, Rationale and Strategies: Erosion of Locke Island is the subject of new report that came out last year (Bjornstad, 2006b.) **(New work incorporated.)**
- Page 2-98, Interpretive Trails: One or both trails on Rattlesnake Mountain (Alternative D) should be interpretive trails to highlight the especially high concentration of ice-rafted erratics and bergmounds, in addition to the wonderful flora of this special area. **(This level of detail will be defined in a step down Visitor Services Plan.)**
- Page 2-101, Rationale and Strategies, second line: Add Earth Science Week (October) to list of special events to promote. **(Change made.)**
- Page 3-13, last paragraph: Daily fluctuations of river level, especially during periods of maximum runoff in June can exacerbate bank erosion at Locke Island (Bjornstad, 2006b), as well as other banks along the Columbia River. **(No correction necessary.)**
- Page 3-16, Vadose Zone, line 3: Since it is an informal stratigraphic term, the word “formation” in Hanford formation is always lowercase. **(No correction necessary.)**
- Page 3-17, Unconfined Aquifer System: The “Plio-Pleistocene unit” is an outdated term. It has been replaced with Cold Creek unit (informal) as documented in DOE (2002). **(Correction made.)**
- Page 3-18 and 3-19, Section 3.3.4: Somewhere in this section the movement of groundwater should be discussed whereby the process of excess irrigation water seeping through the Hanford formation along buried paleochannels atop the relatively impermeable Ringold Formation is leading to the formation of springs and landslide failures along the White Bluffs (Bjornstad 2006a). **(Change made.)**
- Page 3-26, Geologic History, #3: Add “and Cold Creek unit” after “Ringold Formation.” **(Correction made.)**
- Page 3-26, Geologic History, #4: Not all Ice Age floods were from Lake Missoula. Therefore it is more accurate to use “Ice Age floods” rather than “Missoula Floods.” Might add that the

earliest Ice Age floods occurred 1-2 million years ago (Bjornstad et al. 2001; Bjornstad 2006a). **(Correction made.)**

- Page 3-28, Missoula Floods, second paragraph: (Bjornstad and Fecht 1989) not in list of references. A better, more recent reference is Bjornstad et al. (2001) (in reference list above). **(Correction made.)**
- Page 3-28, 3rd line: Ice Age floods inundated the Monument dozens or more times, not just several times. **(Change made.)**
- Page 3-28, last line: Touchet Beds are composed of sand and silt, not just silt. Substitute “slackwater” for “silt.” **(Correction made.)**
- Page 3-28, 3rd to last line: Lake Lewis was not a “glacial” lake. Substitute “hydraulically dammed” for “glacial.” **(Correction made.)**
- Page 3-28, last line: Add “above sea level” after 1,200 feet. **(Change made.)**
- Page 3-29, second line: Lake Lewis is estimated to have lasted only a week or less. Replace (Baker 1978) with more recent (O’Connor and Baker 1992). **(Correction made.)**
- Page 3-30, Rock Strata and Structure, 3rd paragraph: The sedimentary deposits between basalt flows (Ellensburg Formation) and above the basalt (Ringold Formation) are unlithified and therefore technically not rock. Delete the term “rock” in reference to these mostly unconsolidated deposits. **(Correction made.)**
- Page 3-30: Cold Creek unit and Hanford formation are informal names so “unit” and “formation” should be lower case. **(No correction necessary.)**
- Page 3-31, Cold Creek Unit: The discussion of the Cold Creek unit is filled with errors and inaccuracies. Suggest the author rewrite after reading most recent documentation related to these strata (DOE 2002, citation in list above). **(Corrections made.)**
- Page 3-31, last line: Delete (Touchet Beds). Touchet Beds only consist of sand and silt and do not dominate the flood deposits. **(Correction made.)**
- Page 3-37: The description of erratics and bergmounds appears to be based on Bjornstad et al. 2003 and Bjornstad 2006a. The citations should be noted. **(Change made.)**
- Page 3-37, Paleontological Resources, first line: Change “middle” to “upper.” The White Bluffs represent the uppermost Ringold Formation. **(Correction made.)**

- Page 3-122, second paragraph, line 6: The height of the White Bluffs varies along its length. In places they are up to 600 feet high. Use a range for height (e.g., 200-600 feet). **(Change made.)**
- Page 3-125, Topography: Prominent topographic features within the Wahluke Unit include the White Bluffs and landslides. **(Change made.)**
- Page 3-126, Topography: A prominent and significant topographic feature within the Saddle Mountain Unit is the Corfu Landslide (Bjornstad 2006a). Most of it lies north of the Monument, but parts of are within boundaries of the Monument, I believe. Nevertheless access to a spectacular viewpoint of the landslide is via the Monument from the south. **(Change made.)**
- Page 3-129, Topography: Major topographic features within the Rattlesnake Unit are hundreds of ice-rafted bergmounds that cover the surface between 600-1000 feet in elevation (Bjornstad 2006a). **(Change made.)**
- Page 3-211, 3rd paragraph: New findings on the effects of the river flow fluctuations and riverbank erosion are presented in a report published last year (Bjornstad 2006b, see citation above). **(No correction necessary.)**
- Page 4-22, Effects of Geological/Paleontological Resources, first paragraph: Yes, certain geological features (erratics, bergmonds, etc.) exist, but it is misleading to say they are well known. Locations of most erratics and bergmounds are still unknown. Mapped/inventoried locations of erratics/bergmounds on about 25% of Rattlesnake Unit were noted between 2002-2004 (Bjornstad et al. 2003). Locations for the remaining 75% of the Rattlesnake Unit are unknown. There are hundreds more erratics/ bergmounds on the Wahluke Unit that have yet to be located/inventoried. **(Correction made.)**
- Page 4-164, first paragraph: More trails might be expected to spread out use and increase solitude, not decrease it, as this paragraph seems to suggest.
- Page 5-4, 3rd line: Change “pubic” to “public.” **(Correction made.)**

